# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/W.No.13/KRIDL/CSR-09/134a/CUBE/2016-17 04.10.2016

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

*Customer : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.

*Agency : **Technical Manager (West),** KRIDL, Bangalore.

*Name of the work : Construction of RCC Drains near Aswathkatte surrounding area roads and 4th A, B, C, D, E cross all sides Shettyhalli Sub Division in Ward No.13, BBMP, Bangalore.

Reference : AEE/SSD/PR/58/2016-17 Dated: 02.09.2016

*Sample ID : RCC Drain Bed Slab Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 $mm^2$

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

*Grade of Concrete : $M_{20}$

Compressive Strength as on : 28th day

Sample Received on : 04.10.2016

| Sl.No. | *Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 06.09.2016 | 04.10.2016 | 8.347 | 512.4 | 22.77 |
| 2 | 06.09.2016 | 04.10.2016 | 8.156 | 485.6 | 21.58 |
| 3 | 06.09.2016 | 04.10.2016 | 8.294 | 496.8 | 22.08 |

Note:

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2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil Tech Consultants & Engineers Bangalore

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VISHWANATH .C
Quality Manager

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T-2377


Job No.: CTCE/BBMP/W.No.13/KRIDL/CSR-09/134a/CUBE/2016-17 15.09.2016

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | |
|---|---|
| *Customer | : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore. |
| *Agency | : **Technical Manager (West),** KRIDL, Bangalore. |
| *Name of the work | : Construction of RCC Drains near Aswathkatte surrounding area roads and 4th A, B, C, D, E cross all sides Shettyhalli Sub Division in Ward No.13, BBMP, Bangalore. |
| Reference | : AEE/SSD/PR/58/2016-17 Dated: 02.09.2016 |
| *Sample ID | : RCC Drain Side Wall Concrete |
| Size of cubes | : 150mmx150mmx150mm |
| Cross Sectional Area | : 22500 $mm^2$ |
| Technical Reference | : IS: 516-1959 (Reaffirmed 2008) |
| *Grade of Concrete | : $M_{20}$ |
| Compressive Strength as on | : 7th day |
| Sample Received on | : 15.09.2016 |

| Sl.No. | *Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 08.09.2016 | 15.09.2016 | 8.367 | 371.5 | 16.51 |
| 2 | 08.09.2016 | 15.09.2016 | 8.254 | 366.2 | 16.28 |
| 3 | 08.09.2016 | 15.09.2016 | 8.196 | 345.8 | 15.37 |

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**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/W.No.13/KRIDL/CSR-09/134a/CUBE/2016-17 06.10.2016

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | |
|---|---|
| *Customer | : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore. |
| *Agency | : **Technical Manager (West),** KRIDL, Bangalore. |
| *Name of the work | : Construction of RCC Drains near Aswathkatte surrounding area roads and 4th A, B, C, D, E cross all sides Shettyhalli Sub Division in Ward No.13, BBMP, Bangalore. |
| Reference | : AEE/SSD/PR/58/2016-17 Dated: 02.09.2016 |
| *Sample ID | : RCC Drain Side Wall Concrete |
| Size of cubes | : 150mmx150mmx150mm |
| Cross Sectional Area | : 22500 $mm^2$ |
| Technical Reference | : IS: 516-1959 (Reaffirmed 2008) |
| *Grade of Concrete | : $M_{20}$ |
| Compressive Strength as on | : 28th day |
| Sample Received on | : 06.10.2016 |

| Sl.No. | *Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 08.09.2016 | 06.10.2016 | 8.257 | 496.3 | 22.06 |
| 2 | 08.09.2016 | 06.10.2016 | 8.369 | 516.7 | 22.96 |
| 3 | 08.09.2016 | 06.10.2016 | 8.475 | 521.4 | 23.17 |

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**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/W.No.13/KRIDL/CSR-09/134a/CUBE/2016-17 17.09.2016

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

*Customer : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.

*Agency : **Technical Manager (West),** KRIDL, Bangalore.

*Name of the work : Construction of RCC Drains near Aswathkatte surrounding area roads and 4th A, B, C, D, E cross all sides Shettyhalli Sub Division in Ward No.13, BBMP, Bangalore.

Reference : AEE/SSD/PR/58/2016-17 Dated: 02.09.2016

*Sample ID : RCC Drain Covering Slab Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 $mm^2$

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

*Grade of Concrete : $M_{20}$

Compressive Strength as on : 7th day

Sample Received on : 17.09.2016

| Sl.No. | *Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 10.09.2016 | 17.09.2016 | 8.296 | 347.2 | 15.43 |
| 2 | 10.09.2016 | 17.09.2016 | 8.384 | 354.2 | 15.74 |
| 3 | 10.09.2016 | 17.09.2016 | 8.472 | 369.8 | 16.44 |

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T-2377


Job No.: CTCE/BBMP/W.No.13/KRIDL/CSR-09/134a/CUBE/2016-17 08.10.2016

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

*Customer : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.

*Agency : **Technical Manager (West),** KRIDL, Bangalore.

*Name of the work : Construction of RCC Drains near Aswathkatte surrounding area roads and 4th A, B, C, D, E cross all sides Shettyhalli Sub Division in Ward No.13, BBMP, Bangalore.

Reference : AEE/SSD/PR/58/2016-17 Dated: 02.09.2016

*Sample ID : RCC Drain Covering Slab Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 $mm^2$

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

*Grade of Concrete : $M_{20}$

Compressive Strength as on : 28th day

Sample Received on : 08.10.2016

| Sl.No. | *Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 10.09.2016 | 08.10.2016 | 8.157 | 504.8 | 22.44 |
| 2 | 10.09.2016 | 08.10.2016 | 8.263 | 516.2 | 22.94 |
| 3 | 10.09.2016 | 08.10.2016 | 8.395 | 528.5 | 23.49 |

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An ISO 9001:2008 Certified Company

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JAS-ANZ BSCIC ISO 9001 REGISTERED


Job No.: CTCE/BBMP/W.No.13/KRIDL/CSR-09/134a/Pre Cast Slab/2016-17

13.09.2016

## TEST REPORT ON CONCRETE CORE (PRE CAST SLAB)

| | | |
|---|---|---|
| * Name of Customer | : | **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore. |
| * Name of Agency | : | **Technical Manager (West),** KRIDL, Bangalore. |
| * Name of work | : | Construction of RCC Drains near Aswathkatte surrounding area roads and 4th A, B, C, D, E cross all sides Shettyhalli Sub Division in Ward No.13, BBMP, Bangalore. |
| Reference | : | AEE/SSD/PR/58/2016-17 Dated: 02.09.2016 |
| Techinical Reference | : | IS:516-1959 (Reaffirmed 2008), SP-24:1983. |
| Sample ID | : | Precast Slab |
| Sample Received on | : | 08.09.2016 |
| Date of Testing | : | 13.09.2016 |

| Sl. No. | Dia of Core D (mm) | Height of Core H (mm) | Core Wt (Kg) | Density of Core (kg / $m^3$) | H / D | Correction factor (Based on H/D) | Failure Load (kN) | Core Strength ( $N/mm^2$) | Correction Factor for the Dia. (Strength of the Core x 1.08) | Corrected Cylinder Compressive Strength ($N/mm^2$) | Equivalent Cube Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 50.00 | 82.00 | 0.403 | 2503.00 | 1.64 | 0.960 | 31.95 | 16.27 | 17.57 | 16.87 | 21.09 |
| 2 | 50.00 | 83.00 | 0.409 | 2509.66 | 1.66 | 0.965 | 32.65 | 16.63 | 17.96 | 17.33 | 21.66 |
| 3 | 50.00 | 84.00 | 0.416 | 2522.23 | 1.68 | 0.970 | 33.00 | 16.81 | 18.15 | 17.61 | 22.01 |

* Information is furnished by the Customer/Representative

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